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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,703	04/13/2004	Masahiro Iwahara	251737US0XDIV	2932

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
SHIPPEN, MICHAEL L	
ART UNIT	**PAPER NUMBER**
1621	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/822,703	IWAHARA ET AL.	
	Examiner	Art Unit	
	MICHAEL L. SHIPPEN	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-11,18 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-11, 18 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 7, 2005 has been entered.

Claim Rejections - 35 USC § 103[1]

Claims 8-11, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP-10-251179 optionally in view of USP 5,780,690, USP 4,391,997 and USP 4,400,555. JP-10-251179 teaches the claimed process but exemplifies the use of 1% (10,000 ppm) methanol and does not teach a series of reaction zones, note Example 1. The disclosure of JP-10-251179 is not limited to its examples. It would be obvious to one of ordinary skill in the art that the process could be carried out at a lower methanol concentration. One would be motivated to do such since it is known that the presence of methanol deactivates the catalysts which is clearly taught by the entire

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[1] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

disclosure of USP 5,780,690. As to the claims that require a series of reaction zones, such is a well-known expedient in the art as shown by USP 4,391,997 and USP 4,400,555. Particularly note the advantages suggested in column 3 of USP 4,391,997 and the bottom of column 1 to the top of column 3 of USP 4,400,555. One would expect to obtain the same advantages taught by USP 4,391,997 and USP 4,400,555 by modifying the process of JP-10-251179 in the same manner rendering such a modification obvious. Applicant's reliance upon their examples given in the instant specification is noted but not found persuasive of patentability. The examples are not considered to be representative of the prior art nor are they commensurate in scope with the claims. Comparative Example 2 of the specification differs from the prior art example in several ways such as to the sulfur promoter used and the amount modification of the ion exchange resin and the like. None of the instant examples is representative of the claimed process closest to the prior art. None of the instant examples differ only as to the amount of the methanol present. For example, none of the instant examples is carried out with the claimed 8000 ppm of methanol concentration with a 30% modification with the same promoter on the same ion exchange resin used in the prior art under the conditions that are closest to the prior art conditions. As such, it considered that the examples in the specification do not demonstrate the process as claimed is limited to only those embodiments that afford an unexpected result over the prior art.

Double Patenting[2]

Claims 8-11, 18 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/433155 in view of USP 4,400,555. The respective claims differ only by the end points of the recited ranges and the conflicting claims recite that the acetone is fed to separate reactors. The recited ranges clearly overlap. As to the use of separate acetone feeds, this is well known to have advantages as shown by USP 4,400,555. It would be obvious to one of ordinary skill in the art that the process of instant application could be modified in this manner to afford the advantages similar to those taught in USP 4,400,555. The limitation in the instant claims as to the amount of water present does not distinguish the instant claims from the conflicting claims. First, the conflicting claims are silent as to the amount of water but does not exclude its presence. As such, the conflicting claims are open to the amount of water recited in the instant claims. Second, the claimed invention recites that water content is less than

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[2] The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

0.4% by weight. This would read on essentially no water being present which the conflicting claims read upon.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 8-11, 18 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of USP 6,740,784. The respective claims differ only by the end points of the recited ranges. The recited ranges clearly overlap. The limitation in the instant claims as to the amount of water present does not distinguish the instant claims from the conflicting claims. First, the conflicting claims are silent as to the amount of water but does not exclude its presence. As such, the conflicting claims are open to the amount of water recited in the instant claims. Second, the claimed invention of the conflicting patent is clearly intended to embrace this embodiment as is set forth in lines 39-58 of column 4 of the patent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Michael L. Shippen** whose telephone number is **(571) 272-0647**. The Examiner's normal tour of duty is 7:30 AM to 4:00 PM. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(571) 272-1600**. The official group FAX machine number is **571-273-8300**.

MShippen
July 25, 2005

MICHAEL L. SHIPPEN
PRIMARY EXAMINER
ART UNIT 1621